PUBLIC BROCHURE

LOWER SILVER CREEK PLANNING STUDY

Santa Clara Valley Water District

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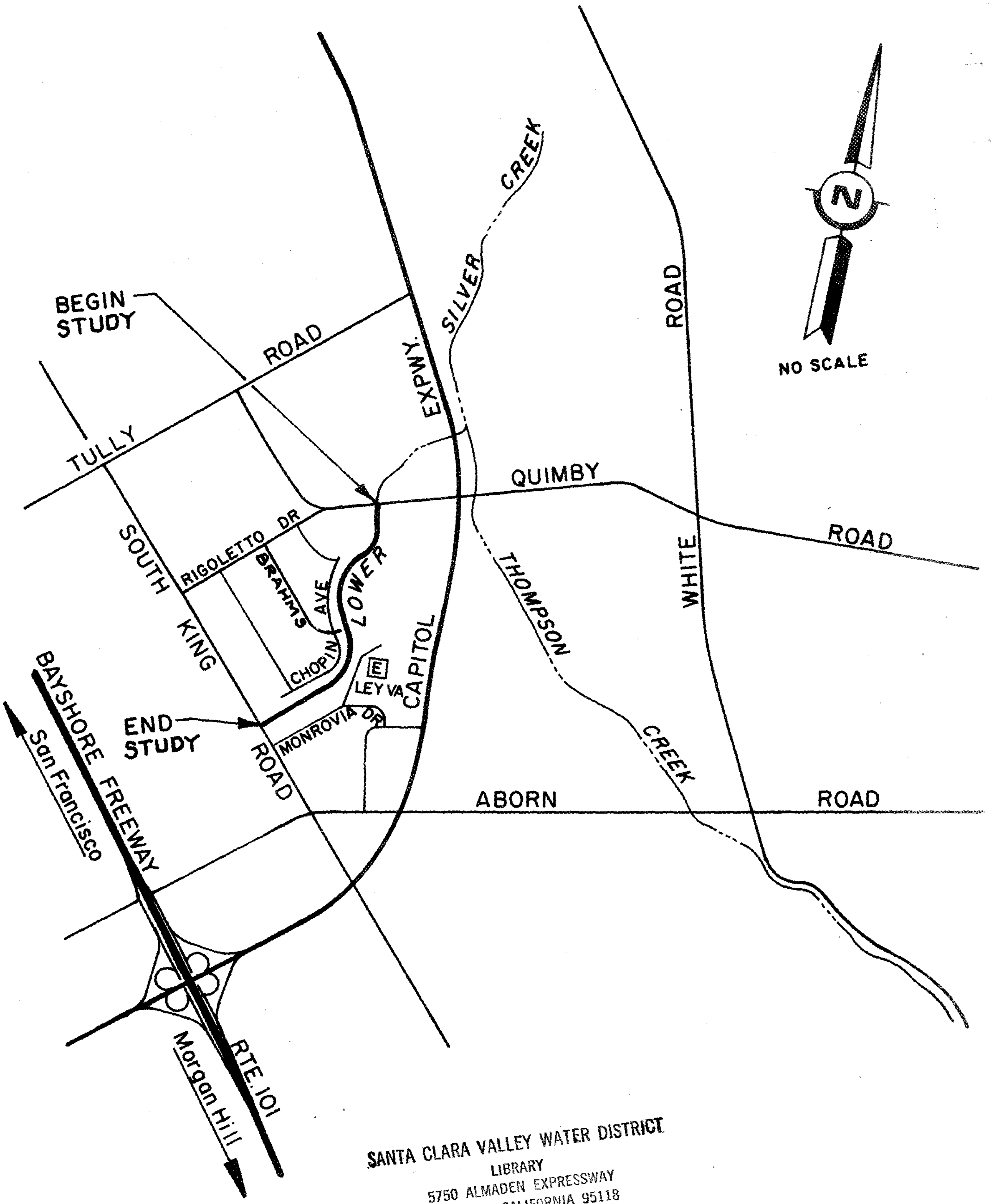

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PUBLIC BROCHURE FOR PLANNING STUDY
ON
LOWER SILVER CREEK
BETWEEN
QUIMBY ROAD AND SOUTH KING ROAD

MARCH 1976

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LOWER SILVER CREEK FROM QUIMBY ROAD TO SOUTH KING ROAD

PURPOSE OF THE BROCHURE

This brochure summarizes the potential flood problem and the alternative methods proposed to alleviate the flooding potential along Lower Silver Creek between Quimby Road and South King Road.

OBJECT OF THE STUDY

The objective of this study is to develop and analyze alternative plans to relieve the potential flood problem. The reach of Lower Silver Creek from Quimby Road to South King Road is the uppermost reach of Lower Silver Creek. Lower Silver Creek extends from Coyote Creek near the Coyote Creek-Bayshore Freeway crossing to South King Road. The final plan for this uppermost reach will become part of the plan for improving the entire Lower Silver Creek.

GENERAL DESCRIPTION OF WATERSHED

The reach of Lower Silver Creek under study in this brochure contains 960 acres of the total Lower Silver Creek Watershed. Figure 1 shows a map of the watershed.

The land use in the watershed of the project described in this brochure is primarily open pasture and residential development in the hills and residential and commercial development along the valley floor.

THE FLOOD PROBLEM

The design flood flow in this uppermost reach of Lower Silver Creek is 220 cubic feet per second. This is the flood that could

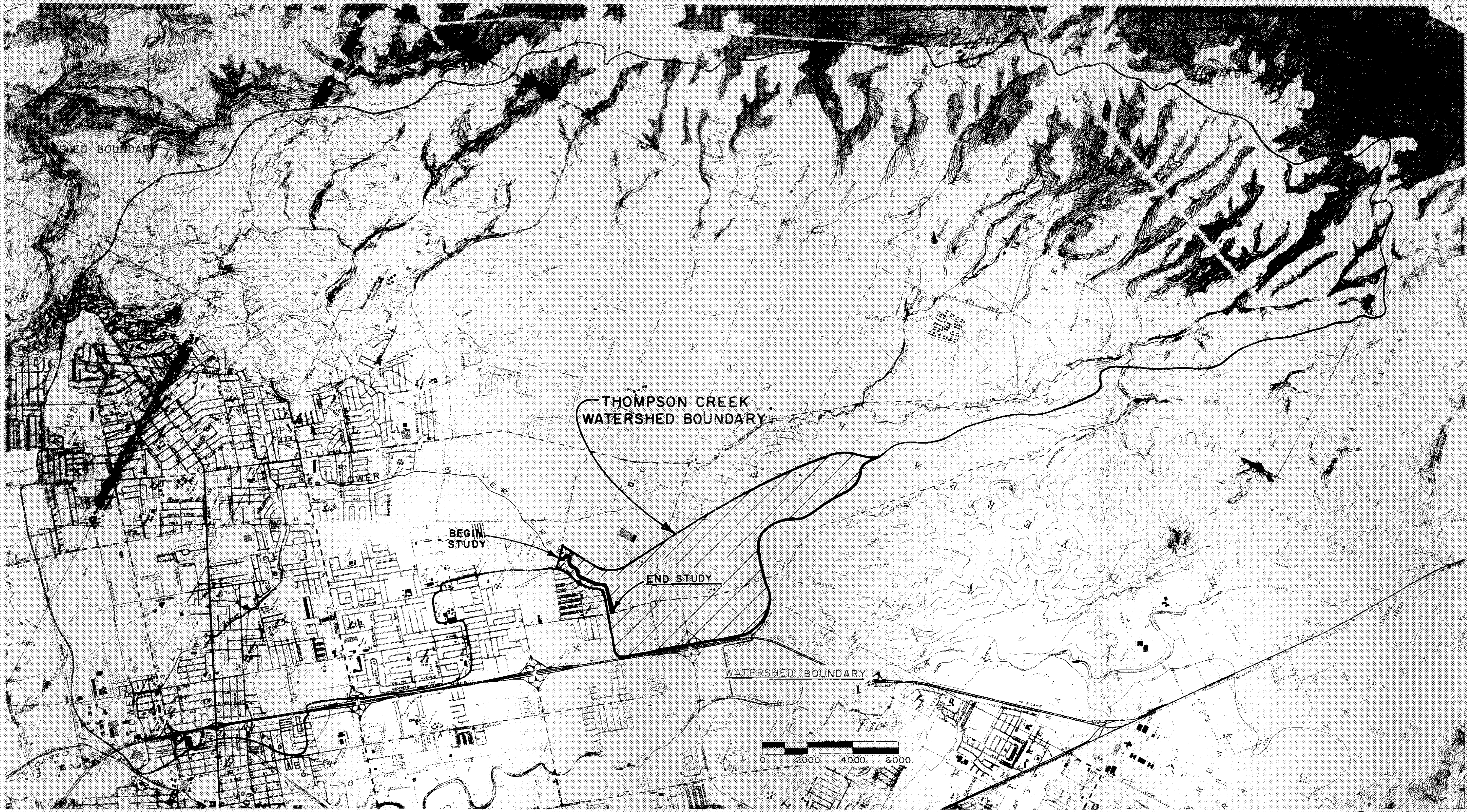


FIGURE I

REFERENCE INFORMATION AND NOTES

LEGEND
— STUDY ROUTE
— WATERSHED BOUNDARY
▨ STUDY WATERSHED

SILVER CREEK WATERSHED
TOTAL ACREAGE = 27000

LOWER SILVER CREEK WATERSHED

be expected to be equaled or exceeded on an average of one in 100 years over a long period of time.

The existing creek from Capitol Expressway to Quimby Road and the culverts under Quimby Road and Capitol Expressway are adequate to carry the design flood. Figure 2 shows the extent of flooding from the design flood. Minor flooding occurs only within nonresidential land. The elevated house pads prevent flooding of private homes. Portions of the George LeyVa Elementary School could flood to a depth of approximately one foot. As a result of residential development in the area, a number of local storm drainage pipes outfall into the existing Lower Silver Creek channel. These outfalls are not effective, however, because the bottom of these pipes are below the bottom of the existing channel. The purpose of the project described herein is to allow the local drainage outfalls to operate effectively and to eliminate potential flooding problems. Alternatives one and two, the do-nothing and the leveed natural channel, will not solve the local drainage problem.

ALTERNATIVE PLANS

The following pages summarize the costs for each of the alternative plans, show drawings of each plan and discuss the "pros" and "cons" of the plan.

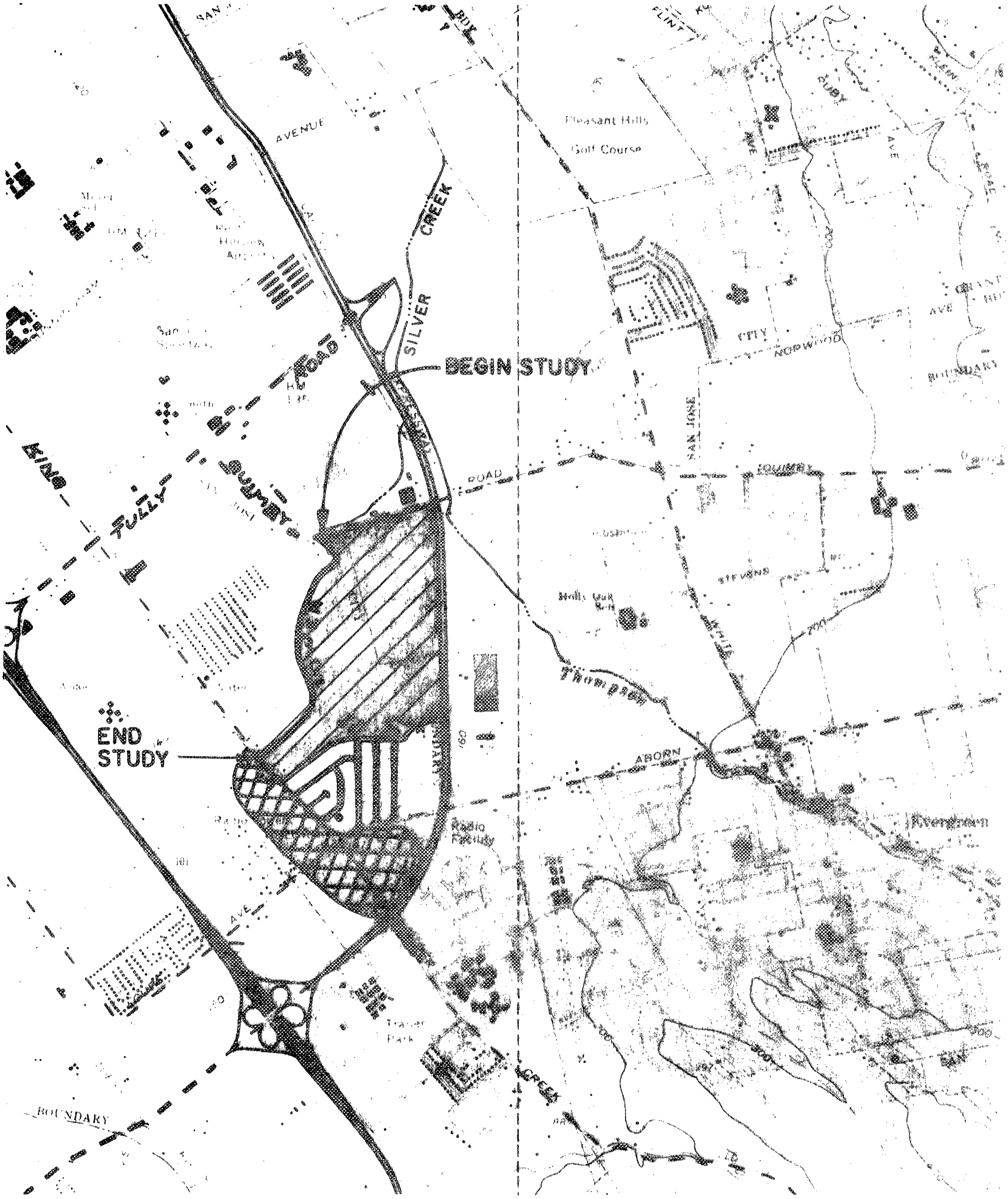


FIGURE-2

LEGEND

▩ Flood Area (City Facilities)

━ Study Creek

▨ Flood Area (Lower Silver)

LOWER SILVER CREEK FLOOD MAP

QUIMBY ROAD TO SOUTH KING ROAD

SCALE: 1"=2000'

Summary of Estimated Costs for Alternative Plans

No.	Alternatives	Right of* Way Cost	Construction Cost	Contingency Cost	Proposed Landscape Cost	Total Cost
1	Do-Nothing	-	-	-	-	-
2	Existing channel with levees	185,000	144,000	51,000	9,000	389,000
3	Excavated channel	180,000	169,000	59,000	10,000	418,000
4	Pipe culvert on existing channel alignment	11,000	528,000	185,000	-	724,000
5	Pipe culvert diversion and excavated channel on existing alignment	128,000	219,000	77,000	13,000	437,000
6	Pipe culvert on channel realignment	12,000	571,000	200,000	-	783,000
7	Pipe culvert diversion, excavated channel to Brahms Avenue, combination pipe and channel from Brahms Avenue 1,200 feet upstream and excavated channel for remainder of reach.	128,000	300,000	105,000	18,000	551,000

*District Dedication Policy will remain in effect until construction is authorized. Right of Way costs subject to change.

LOWER SILVER CREEK

QUIMBY ROAD TO SOUTH KING ROAD

ALTERNATIVE 1

Do-Nothing

Pros

(a) The creek would remain in its existing condition.

(b) Least cost.

Cons

(a) Local streets, undeveloped land, and portions of the Leyva Elementary School would be subject to minor flooding.

(b) Future development in existing floodable, undeveloped areas would require flood proofing.

(c) Unsightly appearance of the existing channel would remain.

LOWER SILVER CREEK

QUIMBY ROAD TO SOUTH KING ROAD

ALTERNATIVE 2

Leave the creek in the existing condition. Construct levees throughout the reach.

(Estimated Cost = $389,000)

Pros

(a) The creek would remain in natural state.

(b) More open space would be available for public use. This open space could be used for recreation activities compatible with flood control purpose.

(c) Low construction cost.

Cons

(a) Flooding identical to "Do-Nothing" alternative would continue until other methods of flood water disposal were developed by private developers or the City of San Jose.

(b) High land cost.

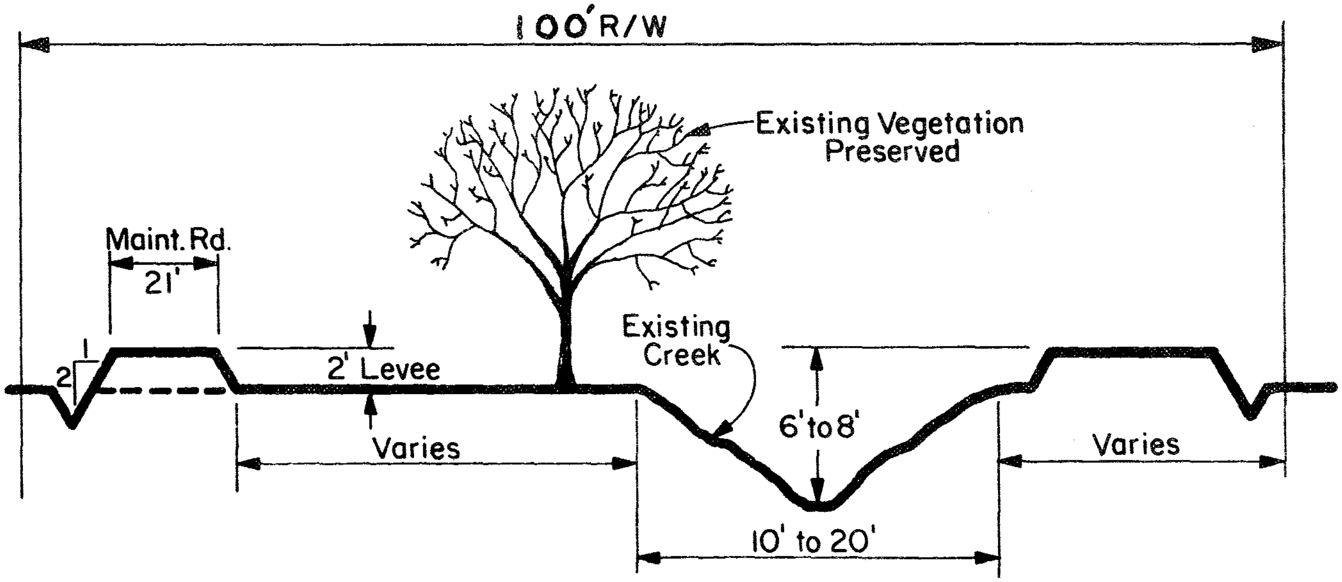


FIG. (3) TYPICAL CROSS SECTION ALTERNATIVE 2

LOWER SILVER CREEK

QUIMBY ROAD TO SOUTH KING ROAD

ALTERNATIVE 3

Excavated channel realignment for downstream 400± feet. Excavated channel on existing alignment for remainder of reach.

(Estimated Cost = $418,000)

Pros

(a) Will provide some open space.

(b) Selected natural vegetation can grow.

(c) Will solve flooding problem.

Cons

(a) All of vegetation will need to be removed from channel way.

(b) Will cost more than leveed channel alternative.

(c) Relocation of a private residence required.

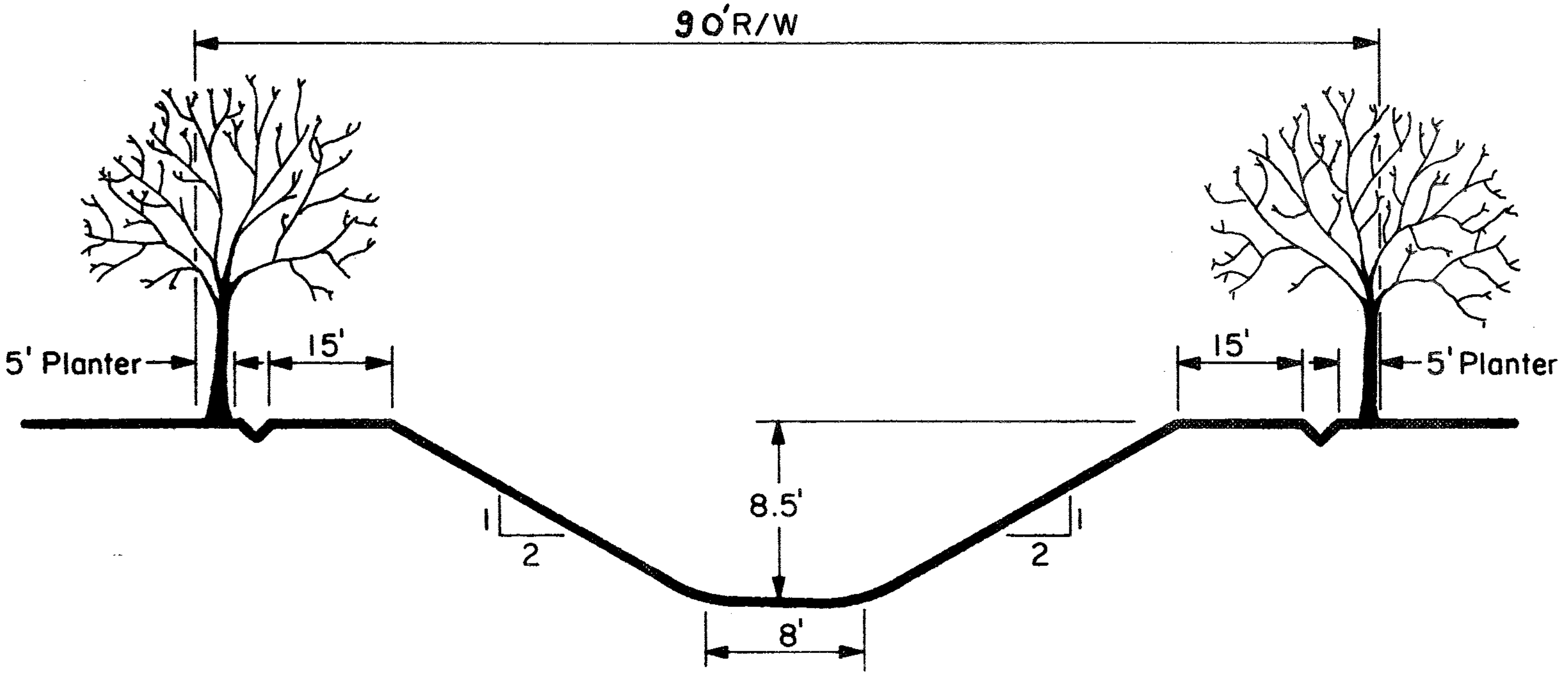


FIG. (4) TYPICAL CROSS SECTION ALTERNATIVE 3

LOWER SILVER CREEK

QUIMBY ROAD TO SOUTH KING ROAD

ALTERNATIVE 4

A reinforced concrete pipe realignment for downstream 400± feet. Pipe culvert along the existing channel alignment for remainder of reach.

(Estimated Cost = $724,000)

Pros	Cons
(a) Minimal effect on environment.	(a) Will destroy the existing creek.
(b) Right of way requirements will be minimal.	(b) Cost is high.
(c) Will solve flooding problem.	(c) No recreation value of the creek.
	(d) Increased cost of local outfalls.

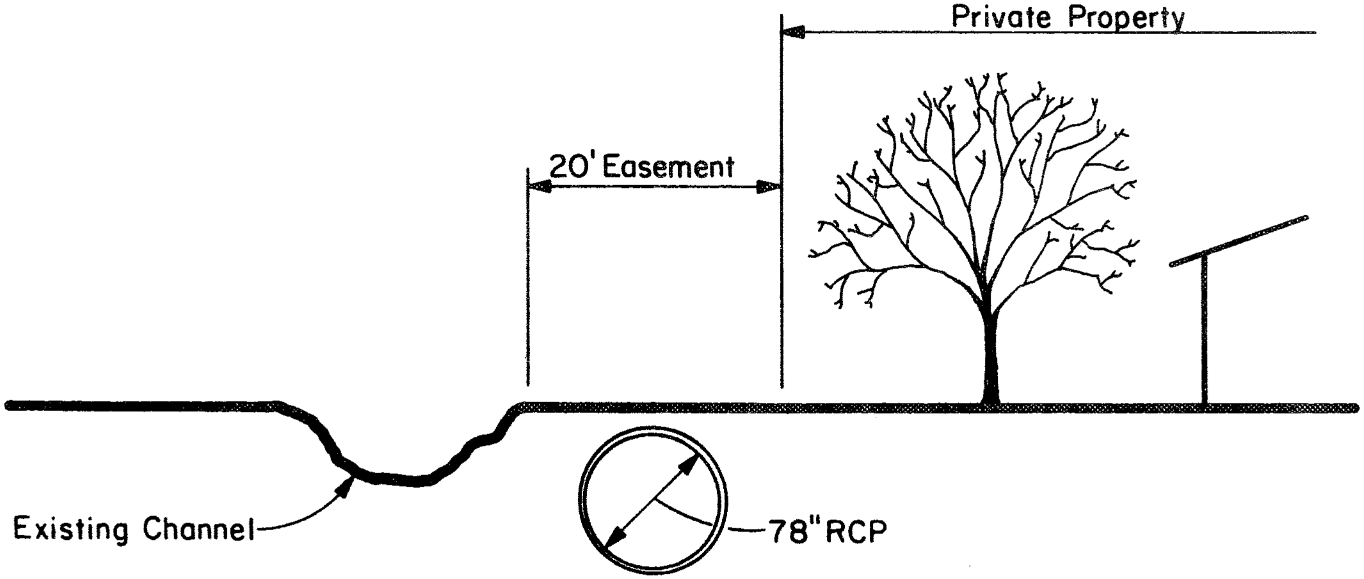


FIG. (5) TYPICAL CROSS SECTION ALTERNATIVE 4

LOWER SILVER CREEK

QUIMBY ROAD TO SOUTH KING ROAD

ALTERNATIVE 5

Pipe culvert diversion for downstream 400± feet. Excavated earth channel along remainder of reach.

(Estimated Cost = $437,000)

Pros

(a) Will provide some open space.

(b) Selected natural vegetation can grow.

(c) No relocation of private residence required.

(d) Low cost of local outfalls.

(e) Will solve flooding problem.

Cons

(a) Existing vegetation would be removed in channel way.

(b) Will cost more than leveed channel alternative.

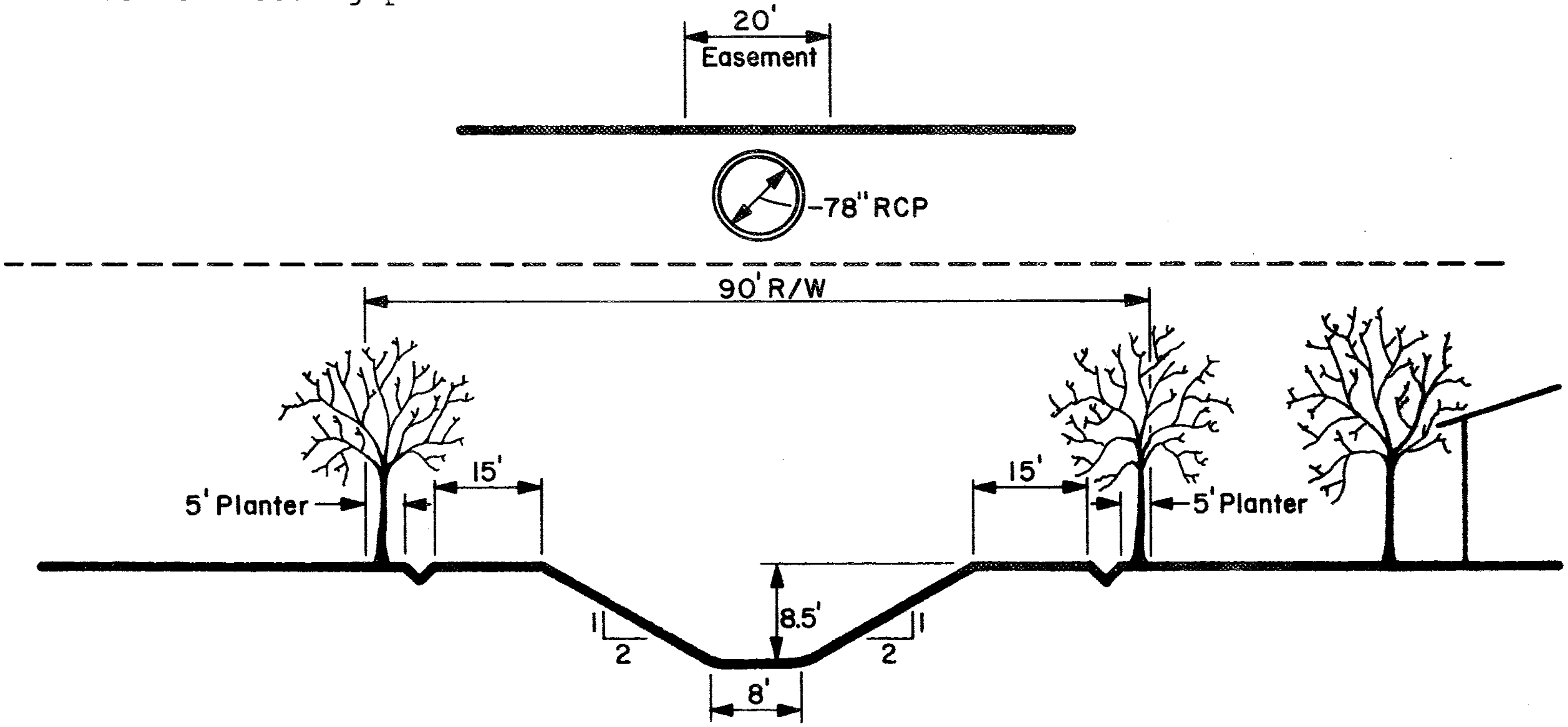
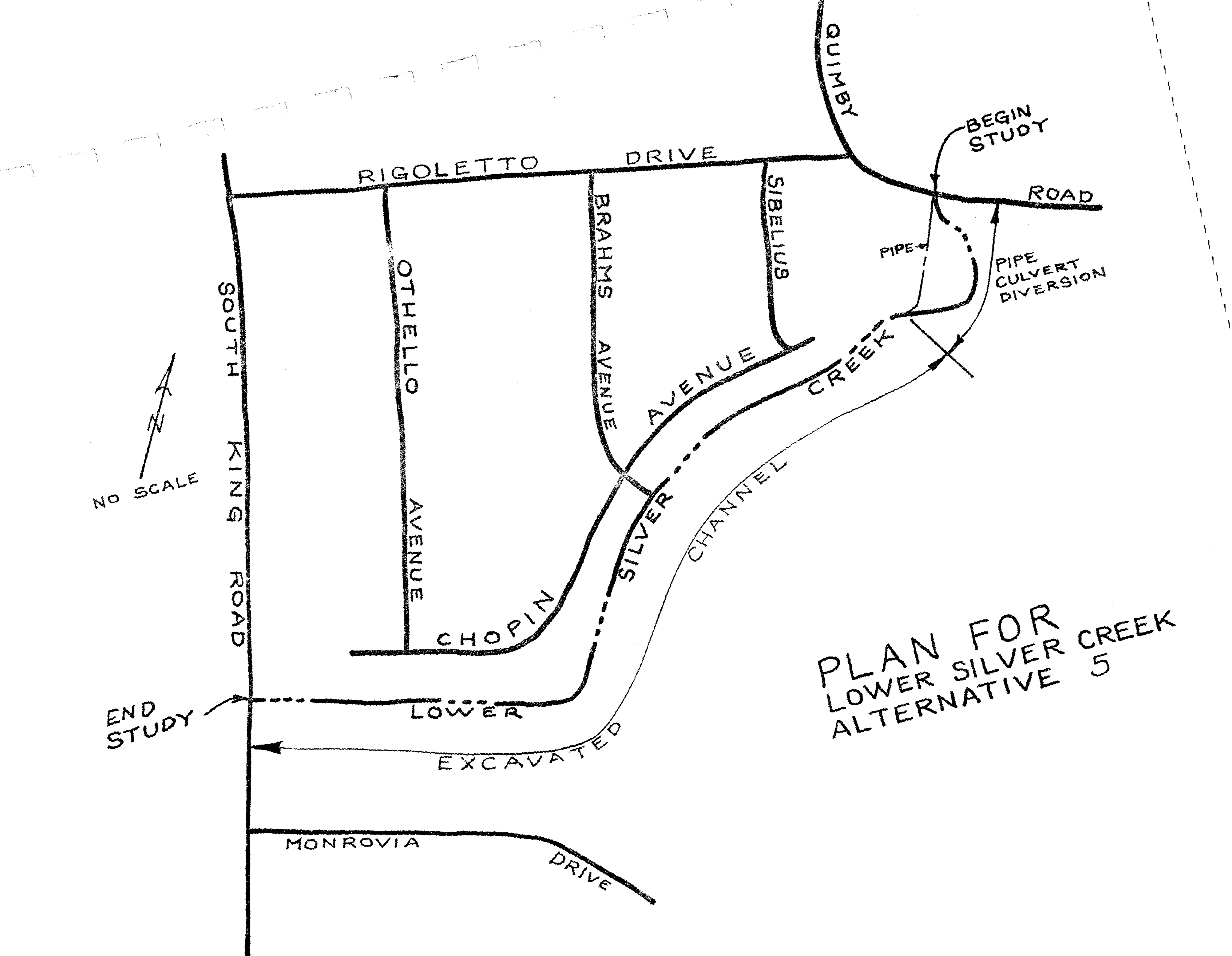


FIG. (6) TYPICAL CROSS SECTION ALTERNATIVE 5



PLAN FOR
LOWER SILVER CREEK
ALTERNATIVE 5

LOWER SILVER CREEK

QUIMBY ROAD TO SOUTH KING ROAD

ALTERNATIVE 6

Pipe culvert on channel realignment.

(Estimated Cost = $783,000)

Pros

(a) No effect on natural existing vegetation near the existing creek.

(b) No disruption of private residences.

Cons

(a) Does not provide a local drainage outfall and local flooding would continue until existing outfalls were extended or reconstructed.

(b) Very expensive.

(c) Construction should wait until road is constructed.

(d) Private development along existing channel may remove the existing channel after pipe culvert is constructed.

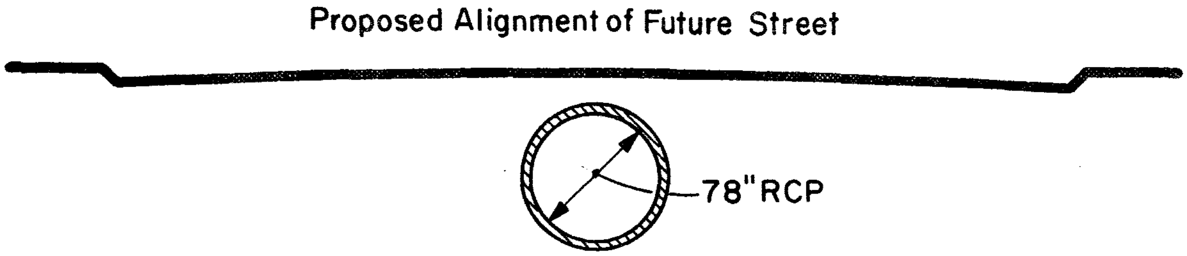


FIG. (7) TYPICAL CROSS SECTION ALTERNATIVE 6

LOWER SILVER CREEK

QUIMBY ROAD TO SOUTH KING ROAD

ALTERNATIVE 7

Pipe culvert diversion for downstream 400± feet. Excavated earth channel from diversion to Brahms Avenue. Swale and pipe combination to 1200 feet upstream of Brahms Avenue. Excavated earth channel for remainder of reach.

(Estimated Cost = $ 551,000)

Pros

(a) Will provide open space.
(b) Selected natural vegetation can grow.
(c) No relocation of private residence required.
(d) Low cost of local outfalls.
(e) Will solve flooding problem.

Cons

(a) Existing vegetation would be removed in channel way.
(b) Will cost more than leveed channel alternative.

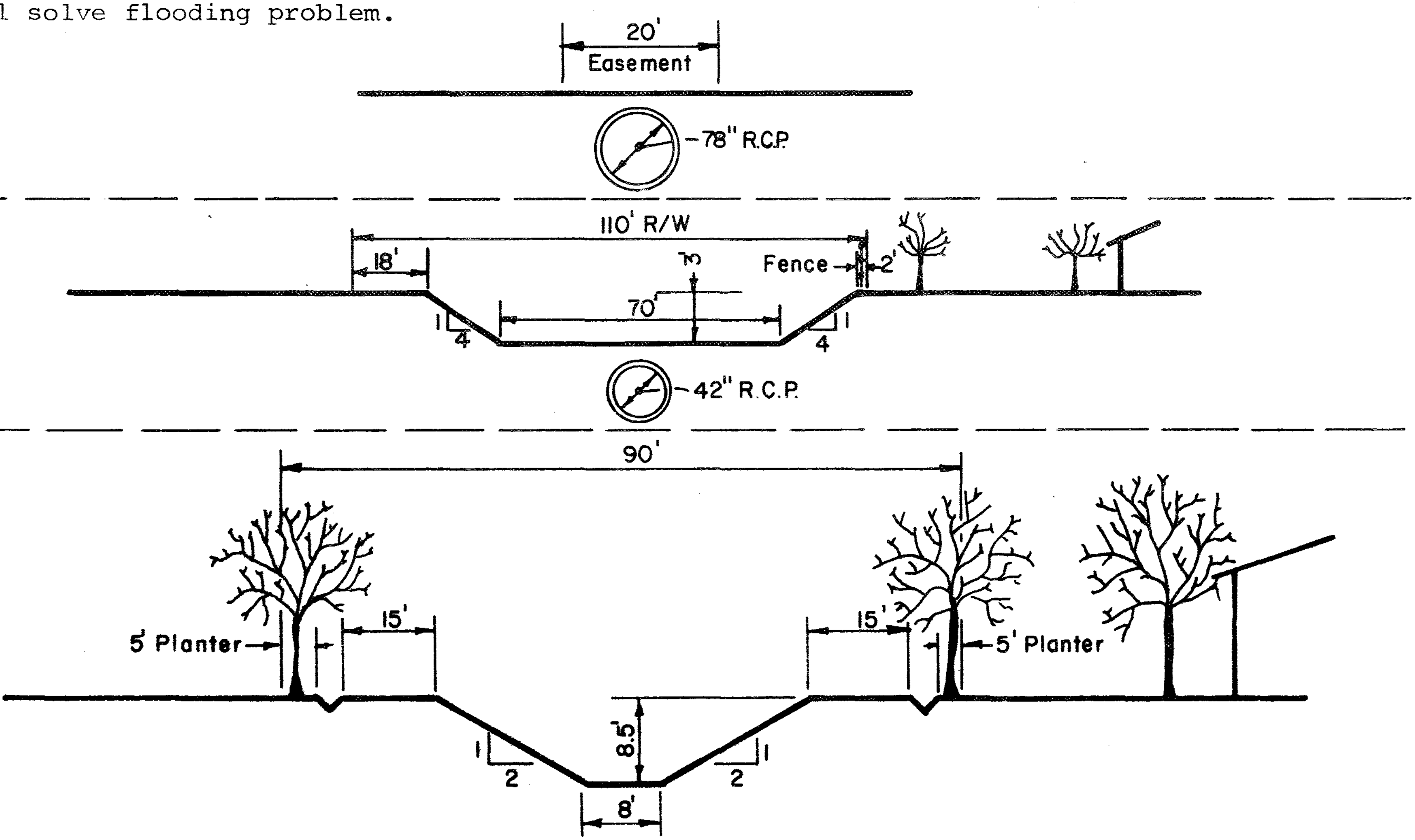
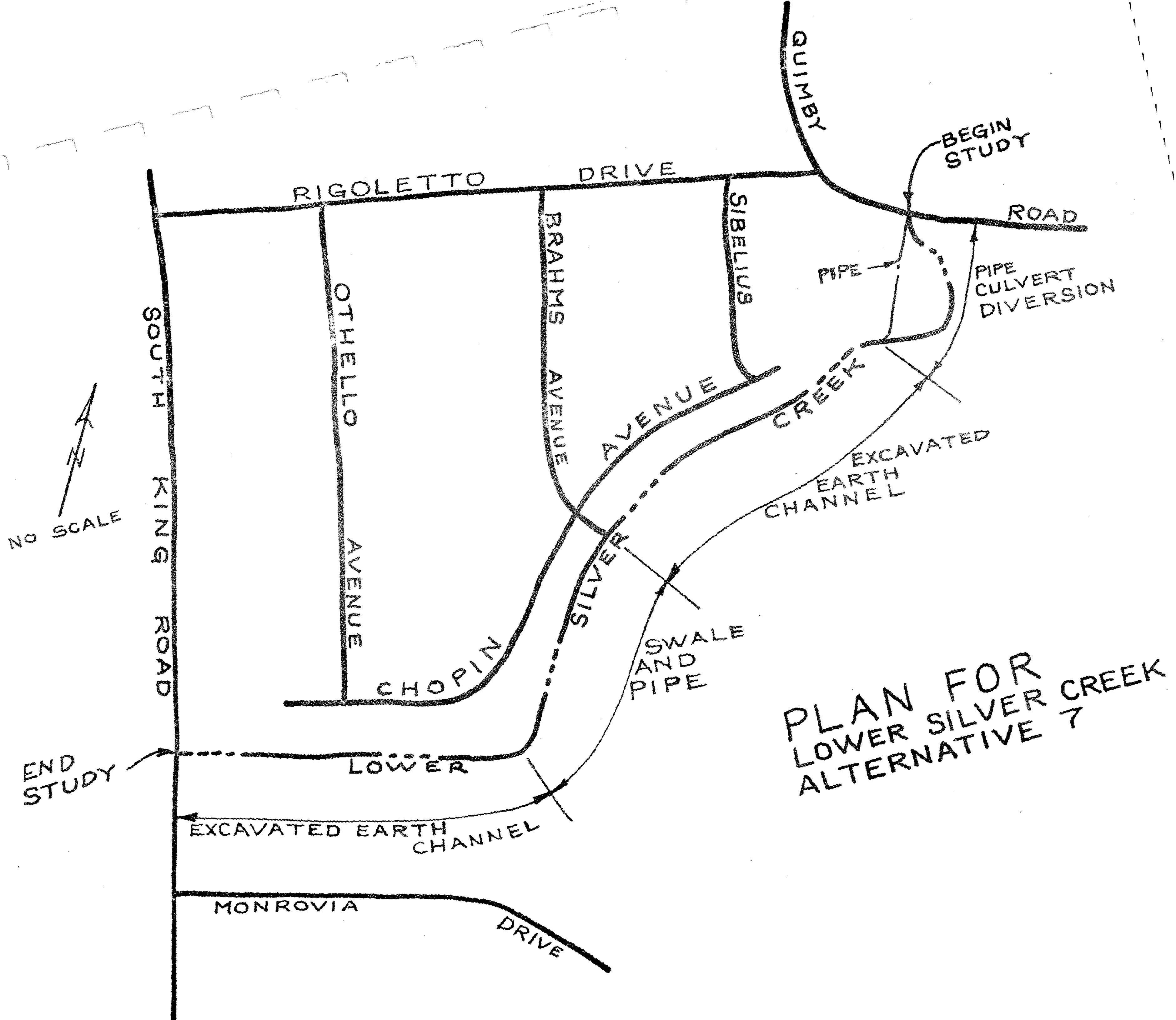


FIG (8) TYPICAL CROSS SECTION ALTERNATIVE 7



PLAN FOR LOWER SILVER CREEK ALTERNATIVE 7

If You Have Any Comments

Or If You Wish To Obtain

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